

IN THE CLAIMS

1. (currently amended): A method, comprising determining an available bandwidth of a communication path between two nodes of a computer network communicatively coupled by the communication path using probe packages that are transmitted between a sender one of the nodes and a receiver one of the nodes via the communication path at varying transmission rates, each successive transmission rate being selected according to: (i) an achieved throughput for a transmission of a preceding one of the probe packages, and (ii) a deviation between the achieved throughput for the transmission of the preceding one of the probe packages and a corresponding transmission rate of the preceding one of the probe packages, wherein the varying transmission rates are increased for successive transmission of probe packages until a probe package transmission rate (t_s) exceeds a corresponding achieved probe package throughput (t_e) over the communication path, wherein once t_s exceeds t_e , the varying transmission rates are increased over a last transmission rate (t_r) for which the probe package transmission rate did not exceed a corresponding achieved probe package throughput over the communication path by a fraction of a transmission rate range defined by a difference between t_s and t_r until t_s no longer exceeds t_r .
2. (original): The method of claim 1, wherein selection of a first one of the transmission rates for the probe packages is performed with knowledge of a bottleneck bandwidth for the communication path.

3. (original): The method of claim 1, wherein selection of a first one of the transmission rates for the probe packages is performed without knowledge of a bottleneck bandwidth for the communication path.
4. (original): The method of claim 1, wherein the probe packages comprise a number of packets.
5. (original): The method of claim 4, wherein the sender one of the nodes advises the receiver one of the nodes of the number of packets comprising each of the probe packages.
6. (original): The method of claim 5, wherein the sender one of the nodes advises the receiver one of the nodes of the number of packets comprising each of the probe packages via a control channel between the two nodes.
7. (original): The method of claim 6, wherein communication between the two nodes over the control channel takes place using a reliable transmission protocol.
8. (original): The method of claim 7, wherein the reliable transmission protocol comprises a transmission control protocol (TCP).

9. (currently amended): The method of claim 7, wherein prior to transmission of a first one of the probe packages, the receiver one of the nodes ~~receiver~~ receives from the sender one of the nodes bottleneck bandwidth information of the communication path.

10. (original): The method of claim 9, wherein the receiver one of the nodes advises the sender one of the nodes of the bottleneck bandwidth using the control channel.

11. (original): The method of claim 1, wherein the receiver one of the nodes instructs the sender one of the nodes regarding a first transmission rate to use for a first one of the probe packages.

12. (original): The method of claim 11, wherein instructions from the receiver one of the nodes to the sender one of the nodes are communicated using a control channel.

13. (original): The method of claim 12, wherein communications using the control channel make use of a reliable communication protocol.

14. (original): The method of claim 13, wherein the reliable communication protocol comprises a transmission control protocol (TCP).

15. (original): The method of claim 1, wherein each of the probe packages comprises a number of user datagram packets (UDPs).

16-19. (canceled).

20. (currently amended): The method of claim [[19]] 1, wherein once t_s no longer exceeds t_r , the varying transmission rates are again increased up to an estimated available bandwidth of the communication path by using t_s as a new value for t_r and adding the fraction of the transmission rate range to this new value of t_r .

21. (original): The method of claim 20 wherein the estimated available bandwidth of the communication path is determined as being one of (i) an acceptable fraction of a bottleneck bandwidth of the communication path, or (ii) a value of the achieved probe packet throughput that is within an acceptable percentage of a corresponding probe package transmission rate.